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SEMESAN BEL

Instantaneous Dip
for
POTATOES





*Small scale
treatment
with Du Bay
Semesan Bel*

**No Longer Need
Diseases Steal**

Your Potato Profits

THE potato is probably more subject to disease than any other one of America's crops. It is estimated that at least 50 per cent of all seed potatoes planted in this country carry disease in some form or other.

Such prevalence of disease on seed pieces can have but the natural result of causing tremendous losses in yield and heavy depreciation of the market value of a large portion of the crop produced.

The loss in yield alone caused by potato diseases is equivalent to one out of every five or six acres planted. Frequently this loss represents the profit on your entire planting.

Treat Certified Seed Also

Even the use of certified seed does not insure against disease. Dr. Wm. H. Martin, Plant Pathologist, New Jersey Experiment Station, says in the February, 1928, issue of the *American Produce Grower*, "Some growers base their argument against seed treatment on the grounds that since they purchase certified seed it should be unnecessary to disinfect it before planting. An examination of the certification requirements of any State will show that this argument is not sound as there is no State that does not permit at least 10 per cent of scab and Rhizoctonia. . . . On the other hand, while scab and Rhizoctonia and black leg exist as a menace to the crop, they can be prevented by seed disinfection."

The cost of seed treatment is small compared to the cost of other operations entering into profitable potato growing, yet the failure to treat your seed before planting frequently represents the difference between a profitable and an unprofitable crop.



Small scale treatment with Du Bay Semesan Bel

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Just Dip Your Potatoes—and Plant

Instantaneous Dip Treatment with SEMESAN BEL Requires No Soaking—No Expensive Equipment—No Extra Labor

THE disagreeable task of disinfecting seed potatoes by means of the old-fashioned, time-consuming soak treatments can now be eliminated.

Just dip your seed potatoes in Semesan Bel instantaneous dip—and plant. Designed specifically to furnish an easy, rapid and simple method of seed potato disinfection, Semesan Bel requires no cumbersome or special equipment, no hot water and no tedious soaking. This new treatment may be carried out at planting time by cutters and wagonmen—no extra or skilled labor is necessary.

Growers have found by practical experience that the Semesan Bel dip method is so rapid that one man alone can easily treat from 200 to 400 bushels of potatoes per day.

Labor saving considered, Semesan Bel often costs less than old-fashioned methods and it brings to the potato grower a quick, practical, and effective method of seed disinfection.

Effective in Disease Control

Semesan Bel "dip" dries quickly on the seed, forming a thin coating of disinfectant that cannot easily be rubbed off by handling and planting. Surface-borne organisms of Rhizoctonia, scab and black leg are usually destroyed. The attacks of certain soil-infesting organisms are often prevented by the coating of disinfectant which remains on the seed piece throughout the season.

No seed treatment can be expected to protect the new crop from infections by soil-borne scab or Rhizoctonia.

By cleansing the surface of the seed piece and protecting it from decay until the plant is well started Semesan Bel generally helps to improve the stand and vigor of the

plants—thus making them more capable of producing larger yields and cleaner, more marketable crops.

Harmless to Sprouted Seed

Semesan Bel, when applied according to directions, usually does not injure whole or cut seed. Even sprouted seed may be treated with Semesan Bel with little danger of injury, while the old-fashioned treatments (corrosive sublimate and formaldehyde) often injure both the sprouts and seed, retard germination and consequently reduce the stand and yield.

A Pound Treats 16 to 22 Bushels of Seed

Semesan Bel mixes readily with cold water and the treating mixture retains its antiseptic strength to the last dip.

One pound of Semesan Bel will make 10 quarts of dip which will treat approximately 22 bushels of whole or large seed pieces and about 16 bushels of small or cut seed.

Full directions are packed in every container.



Ordinary equipment around the farm may be used for Semesan Bel treatments

Enthusiastic Reports from Successful Growers Demonstrate Simplicity and Profitable Benefits of SEMESAN BEL INSTANTANEOUS Potato Dip

THE lack of a practical method of seed treatment has long been a weak spot in efficient potato growing. Methods of planting, digging, cultivating, spraying and fertilizing have been steadily improved. But until recently little, if any, progress has been made in the development of more practical and satisfactory methods of treating seed potatoes.

With the development of the Semesan Bel instantaneous dip there is now available to the potato grower a new, rapid and effective potato disinfectant which eliminates many of the disadvantages of old-fashioned methods.

Comments from some of the users of Semesan Bel give evidence of the general satisfaction this new potato disinfectant has produced under practical growing conditions.

Growers Like Ease of Application

W. J. Kennedy, of Colorado, writes: "I am much impressed with the ease, economy and simplicity of Semesan Bel treatments. With other methods, the average farmer is not equipped to handle them properly and they require so much more time and labor."

Better Results with Semesan Bel

A Maine grower, A. S. Lihby, reports that he: "Used Semesan Bel in competition with corrosive sublimate and obtained 8 to 10 barrels (22 to 28 bushels) per larger acre yield from the Semesan Bel treated seed."

Usually Promotes Better Sprouting

Semesan Bel treated seed potatoes usually sprout more uniformly than untreated ones. For example, C. H. Hasegmann, of Idaho, a large producer of high-grade seed, says: "My Semesan Bel treated seed germinated quickly and uniformly and gave me a perfect stand."

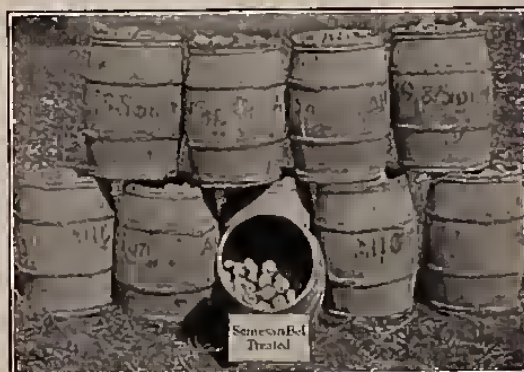
Helps Produce Better Stands

Experience has shown that Semesan Bel treatments generally result in sturdy sprouts and excellent stands. For example, F. W. Pirie, of New Brunswick, Canada, says: "... we treated over 1000 barrels of cut seed, 700 barrels of which were Government Certified Red Bliss 'Frimph' grown from our own plants. The plants showed a wonderful stand all through the process of growth."

Disease Control Means Better Quality

Semesan Bel, as many growers have found, generally produces potatoes of better quality due to its control of certain diseases which blight the tubers and reduce their market value.

The Amis Bros. Company, of Texas, state that the best seed they were able to purchase was so infected with scab and Rhizoctonia that they hesitated to plant, but finally decided to treat about 1000 bushels of this seed. They reported: "The plants grew up vigorously, producing above average and showed no scab or Rhizoctonia. The whole deal showed us a nice profit and we believe had the Semesan Bel treatment not been applied we would have faced a loss."



Semesan Bel increased yields of No. 1 potatoes over corrosive sublimate treated seed by 9.5 barrels per acre, for A. H. Christie & Son of Maine

Earlier Maturity Is a Frequent Advantage

Highly profitable results were obtained from early maturity by W. M. Raper, North Carolina, who says: "My Semesan Bel treated potatoes matured 5 days earlier, giving me the advantage of a much higher market that netted me an increased profit of \$1125, which is exactly what Semesan Bel was worth to me this year."

Generally Increases Yields

From all sections of the country, we have enthusiastic reports of increased yields. Typical of these is one received from A. H. Christie & Son, of Maine, who write: "At digging time, the same number of Semesan Bel treated rows yielded 5 barrels per acre more than the untreated rows and 7 barrels more than the corrosive treated rows. The potatoes from the Semesan Bel treated rows also graded 9 1/2 barrels more No. 1 stock than those from the corrosive sublimate treated part of the crop."

W. H. Gordan, of Texas, "... found after sacking, that the Semesan Bel treated acreage yielded a total of 25 per cent more potatoes with 28 per cent increase in firsts over the untreated plot, in spite of deficient rainfall throughout the growing season."

According to Elmer Osking, The Dean-Osking Company, of North Dakota, "Semesan Bel has anything heat that we have ever tried for treatment by at least 15 to 20 per cent."

Carl E. Randolph, of Maine, writes: "... I harvested the Semesan Bel treated and untreated potatoes and found that the Semesan Bel treated potatoes yielded 71.8 barrels compared with 60.4 barrels untreated, an increase of 21.4 barrels per acre."

Usually Benefits Sweet Potatoes

Semesan Bel is frequently effective in controlling such common infections of sweet potatoes as surface-borne black rot and scurf or soil stain.

"We had good results the last two seasons on our sweet potato beds," reports the J. E. Hoopes Company, large Iowa growers, while from Delaware comes the statement of J. E. Dutton & Son that: "The treated sprouts showed great improvement over the untreated seed, the roots being clean and free of disease. There was an increased yield from the Semesan Bel treated sprouts and the potatoes were bright, clean and disease-free."

Do Not Plant Internally Diseased Seed

Seed potatoes infected internally with rots caused by such organisms as Fusarium are unfit for planting and cannot be successfully disinfected.

Other Uses for Semesan Bel

Semesan Bel is recommended also for the disinfection of such flower roots as dahlias and iris.

Complete Directions Are Packed in Every Container



A big yield of potatoes from Semesan Bel treated seed on Reed Brothers Seed Farm in Maine

Convincing Proof from Experts

IN reporting his results of three-year tests with organic mercuries, such as Potassium Bel, at the 1927 Annual Meeting of the Potato Association of America, Dr. William H. Martin, of the New Jersey Agricultural Experiment Station, said: "All of the treatments (on Green Mountain seed) gave an increase over the untreated checks, these increases amounting to from 4.7 to 45.4 bushels per acre. . . . It should be noted that all of the organic mercury treatments gave yields as good or better than the mercuric chloride treatment."

"The organic mercury compounds (Dipdust and its successor, Semesan Bel) . . . again give control of scab equal in or better than that resulting from the use of the standard 1 1/2-hour treatment in mercuric chloride."

In an article contributed to the February, 1928, issue of *The Southern Planter*, A. B. Bryan, of Clemson College, South Carolina, wrote:

"Even the best Irish potato seed obtained from Northern seed producers by Southern farmers may be infected with Rhizoctonia, a seed-borne fungous disease, for the certification rules do not prohibit shipment of seed so infected. Hence a new remedy, Bayer's Dipdust treatment (our trade-named Du Bay Semesan Bel), tested in South Carolina's potato area in 1927 and found very effective, should be a welcome companion to the well-known corrosive sublimate treatment, especially since it is somewhat simpler and more efficient and, though more expensive, still insignificant in cost when the increased yield is considered."

Evidence from County Agents

POTATOES treated with Semesan Bel (formerly Dipdust) gave an increased yield of 12 1/2 bushels per acre over those not treated," says C. A. Johnson, a county agent, of Georgia, who continues: "Grades were not measured, but it was very evident that there was a much smaller proportion of little potatoes coming from the treated plots than from the untreated ones. Results obtained were sufficient and convincing enough to endorse it and recommend its use."

From Iowa comes the report of County Agent Paul A. Johnson, who writes: "Potatoes treated with Semesan Bel (formerly Dipdust) were just as clear as those treated with hot formaldehyde. It is easy to treat the seed. The yield from Ohio seed treated with Semesan Bel was 251 bushels per acre, whereas the same seed untreated yielded only 214 bushels per acre, showing an increase of 37 bushels, or 17.3 per cent in favor of the treatment."

"When tested on Cohlers, Semesan Bel treated seed produced 166 bushels per acre, while only 18.3 bushels per acre were obtained from untreated seed of the same lot, resulting in an increase of 88 bushels, or about 113 per cent."



Semesan Bel increased the yield on the Texas farm of W. H. Gordan by 19.2 bushels per acre, or 25.4 per cent, and also increased the firsts by 28.3 per cent



Notice the great improvement in stand and vigor of growth of the Semesan Bel treated plants compared with untreated ones. Grown in North Dakota, by O. O. Brumbaugh

Grow a Larger Crop of Better Quality Potatoes with SEMESAN BEL

Why You Should Use —

SEMESAN BEL

for Treating Seed Potatoes

- 1** It is easily and quickly applied by the *instantaneous* dip method, eliminating the need of special equipment, extra labor and loss of time in soaking.
- 2** It often helps to produce larger crops of marketable potatoes at a lower cost per bushel.
- 3** It generally controls such destructive seed-borne diseases as scab, Rhizoctonia and black leg.
- 4** It is less likely to injure sprouted seed than the older treatments which usually destroy the sprouts and thus retard germination.
- 5** It generally protects the seed piece against certain soil-borne organisms during the sprouting period.
- 6** It frequently promotes more uniform germination of seed pieces and often improves the stand and the vigor of the plants.
- 7** Its cost is small compared to profits derived from its use.

Du Bay Semesan Bel is the successor to the seed potato disinfectants formerly sold under the trade names "Du Pont Semesan Bel" and "Bayer Dipdust."



Increase at the rate of 21 barrels per acre due to Semesan Bel treatment, on the Maine farm of C. E. Randolph



SEED DISINFECTANTS

SEMESAN BEL

An Instantaneous Dip Disinfectant for Seed Potatoes.

4-oz. tin.....	\$.50	25-lb. pail.....	\$ 31.25
1-lb. tin.....	1.75	100-lb. drum....	120.00
5-lb. tin.....	8.00	300-lb. drum....	345.00

CERESAN

A Dust Disinfectant for Wheat, Oats, Barley
and Certain Other Cereals.

8-oz. tin.....	\$.50	25-lb. pail.....	\$ 12.50
1-lb. tin.....	.75	100-lb. drum....	49.00
5-lb. tin.....	3.00	300-lb. drum....	144.00

SEMESAN

A General Disinfectant for Many Vegetable and
Flower Seeds or Bulbs, and Certain
Plant Diseases.

2-oz. tin.....	\$.50	25-lb. pail.....	\$ 56.25
1-lb. tin.....	2.75	100-lb. drum....	220.00
5-lb. tin.....	13.00	300-lb. drum....	645.00

SEMESAN JR.

A Dust Disinfectant for Seed Corn.

4-oz. tin.....	\$.50	25-lb. pail.....	\$ 31.25
1-lb. tin.....	1.75	100-lb. drum....	120.00
5-lb. tin.....	8.00	300-lb. drum....	345.00

Du Bay Seed Disinfectants are poisonous and owing to present Postal Regulations cannot be sent through the mails but must be sent by express or freight.

BAYER-SEMESAN COMPANY, INC.

105 Hudson Street

New York, N. Y.

for Sale by

